

Claims

1. Reader device for radio frequency identification transponders, comprising:
a radio frequency interface (150) and an antenna (160) such that said reader device (600) is
5 adapted to communicate with said radio frequency identification transponders (700) in a
reader operation mode;
characterized by
an associated transponder logic unit (200, 210, 510) which is connectable to said radio
frequency interface (150), wherein said transponder logic unit (200, 210, 510) is operable in a
10 transponder operation mode, in which said reader device (600) acts as a radio frequency
identification transponder (700).
2. Reader device according to claim 1, which comprises a reader logic unit (300, 310), which is
connected to said radio frequency interface (150) and which allows for operating said reader
15 operation mode.
3. Reader device according to claim 1 or claim 2, wherein said transponder operation mode is
operable independently from any power supply.
- 20 4. Reader device according to claim 2 or claim 3, wherein said reader device (600) is adapted to
operate as a passive radio frequency identification transponder (700) in said transponder
operation mode.
5. Reader device according to claim 2 or claim 3, wherein said reader device (600) acts as a
25 passive read-only radio frequency identification transponder (700) in said transponder
operation mode.
6. Reader device according to any one of the preceding claims, wherein said transponder logic
unit (200) comprises a transponder memory (250).
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7. Reader device according to claim 6, wherein said transponder memory (250) is non-volatile.
8. Reader device according to claim 6 or claim 7, wherein said transponder memory (250) is
configurable.
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9. Reader device according to any one of the preceding claims, wherein said transponder logic
unit (200) is coupled through a switch unit (100, 610) to said radio frequency interface (150),

wherein said switch unit (100, 610) is operable to select between said reader operation mode and said transponder operation mode.

5 10. Reader device according to any one of the preceding claims, wherein said reader device (600) operates autonomously in said transponder operation mode during periods of time, within which said reader device (600) is not energized.

10 11. Reader device according to any one of the preceding claims, wherein said radio frequency interface (150) is adapted to provide signals required for operation of said reader device (600) in said reader operation mode and said transponder operation mode.

12. Reader device according to any one or the preceding claims, wherein said reader device supports near field communication (ECMA-340) standard, wherein said reader device (600) is operable with a passive communication mode in said reader operation mode, wherein said
15 reader device (600) is operable with a show communication mode in said transponder operation mode.

13. Reader device according to claim 12, wherein said reader device (600) is operable with an active communication mode in said reader operation mode.
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14. Portable electronic device which is connected to a reader device (600) for radio frequency identification transponders, wherein said reader device (600) comprises:
a radio frequency interface (150) and an antenna (160) such that said reader device (600) is adapted to communicate at least with said radio frequency identification transponders (700)
25 in a reader operation mode;
characterized by
an associated transponder logic unit (200, 210, 510) which is connectable to said radio frequency interface (150), wherein said transponder logic unit (200, 210, 510) is operable in a transponder operation mode, in which said reader device (600) acts as a radio frequency
30 identification transponder (700).

15. Portable terminal according to claim 14, wherein said reader device is a reader device (600) according to any one of the claims 1 to 13.

35 16. Portable terminal according to claim 14 or claim 15, wherein said portable electronic device is enabled to communicate via a public land mobile network.

17. System including a portable electronic device and a reader device (600) for radio frequency identification transponders, which is connected to said portable electronic device, wherein said reader device (600) comprises:

5 a radio frequency interface (150) and an antenna (160) such that said reader device (600) is adapted to communicate at least with said radio frequency identification transponders (700) in a reader operation mode;

characterized by

10 a transponder logic unit (200, 210, 510) which is connected to said radio frequency interface (150), wherein said transponder logic unit (200, 210, 510) is operable in a transponder operation mode, in which said reader device (600) acts as a radio frequency identification transponder (700).

18. System according to claim 17, wherein said reader device is a reader device (600) according to any one of the claims 1 to 13.

15 19. System according to claim 17 or claim 18, wherein said portable electronic device is enabled to communicate via a public land mobile network.